

Application No. 09/965,537
Amendment dated November 12, 2004
Reply to Office Action dated August 12, 2004

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claim 1 (Previously presented): A broadcast network comprising:

- a) an optical transmitter for broadcasting a single optical signal to a plurality of end users at different locations;
- b) a branch point optically coupled to the optical transmitter, wherein the branch point includes a 1x2 element;
- c) a first optical fiber cable that includes a plurality of N individual fibers optically coupled to a first output of the 1x2 element; wherein the number N of individual fibers corresponds to the number of end users; and
- d) a second optical fiber cable that includes a plurality of N individual fibers optically coupled to a second output of the 1x2 element, wherein the number N of individual fibers corresponds to the number of end users, and the first and second optical fiber cables provide route diversity in the broadcast network.

Claim 2 (Original): The broadcast network of claim 1 wherein the network is arranged as a logical star.

Claim 3 (Original): The broadcast network of claim 1 wherein the network is arranged as a physical bus.

Claim 4-7 (Canceled)

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Claim 8 (Original): The broadcast network of claim 1 further comprising:

a central office, wherein the branch point is located in the central office.

Claim 9 (Original): The broadcast network of claim 1 wherein the branch point is located in the field.

Claim 10 (Canceled)

Claim 11 (Previously presented): The broadcast network of claim 1 further including:

e) at least one optical receiver for receiving one of the individual fibers.

Claim 12 (Previously presented): The broadcast network of claim 1 further including:

e) a plurality of optical receivers; wherein each receiver is coupled to a respective individual fiber in the first optical fiber cable and a respective individual fiber in the second optical fiber cable.

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Claim 13 (Original): The broadcast network of claim 1 wherein the optical transmitter includes:

an optical source for providing an optical signal;

an optical modulator for receiving data signals, for receiving the optical signal, and for modulating the optical signal based on the data signals to generate a modulated optical signal.

Claim 14 (Original): The broadcast network of claim 13 wherein the optical transmitter further includes:

a multiplexer for receiving a plurality of data signals and based thereon for generating a multiplexed signal;

wherein the multiplexed signal is provided to the optical modulator.

Claim 15 (Previously presented): The broadcast network of claim 14 wherein the optical receiver includes:

a photodetector for receiving a modulated optical signal that includes data signals, for demodulating the modulated optical signal to recover the data signals.

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Claim 16 (Original): The broadcast network of claim 15 wherein the optical receiver further includes:

a de-multiplexer for receiving a recovered multiplexed data signal and based thereon for generating the individual data signals.

Claim 17 (Original): The broadcast network of claim 1 wherein the optical transmitter transmits the signal on all the individual fibers.

Claim 18 (Previously presented): A method for broadcasting information through a broadcast network using a first multi-optical-fiber cable that includes a plurality of N individual optical fibers and a second multi-optical-fiber cable that includes a plurality of N individual optical fibers where N represents the number of users, the method comprising:

receiving a broadcast signal;

transmitting the broadcast signal through at least one of the first and second multi-optical-fiber cables; and

delivering the broadcast signal to a respective user through a dedicated individual optical fiber in the at least one multi-optical-fiber cable that was used to transmit the broadcast signal.

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Claim 19 (Original): The method of claim 18 further comprising the steps of:

using an optical receiver to receive the signal.

Claim 20 (Previously presented): The method of claim 18 further comprising the steps of:

transmitting the same signal on all the individual fibers of the at least one multi-optical-fiber cable.